A Texas-Sized Solution

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They say that what starts here in Texas changes the world, and that phrase has never rung truer than it does today. Extreme weather events and population numbers are on the rise, and Texas is experiencing its fair share of both. Texas' population is projected to double to 55 million by 2050, and our battles with droughts, floods and hurricanes occur all too often. To solve these issues, we need expert help, and that is precisely what the professionals at Planet Texas 2050 are working toward.

The grand challenge program, launched by the University of Texas in January 2018, combines research from the university's academic departments with findings from statewide studies to identify solutions to the state's most pressing issues. "Our focus is on figuring out how to make Texas resilient … a place that's safe, healthy and ecologically and economically vibrant for everyone who lives here now and will live here in 2050," says Katherine Lieberknecht, chair of the Planet Texas 2050 Organizing Committee.

The program has four main research pillars: water, energy, urbanization and ecosystem services. All of these pillars influence food availability, but water is particularly essential as a necessary resource for farmers, ranchers and other food producers. One of Lieberknecht's projects within Planet Texas 2050, the Texas Metro Observatory, will look at "using Austin as a template to figure out how to access food security across the state," she says. "Even without the complications of extreme weather events, like increasing droughts, just having more people here puts more demand on existing food system infrastructure."

When asked what Texans can do to prepare for these projected changes, Lieberknecht championed community outreach. "I would encourage people to not only think about water at the household scale but also to start discussions at the city scale about ways to make Texas cities more water-smart over the next couple decades as a way to create that resilient system for the rest of our water uses, including agriculture."

Experts will also study ecosystems and ways to protect the soil we so rely on. The project is projected to finish in seven years, and at its completion, Lieberknecht says they will begin implementing real changes based on their research. "Our hope is that the new knowledge and the tools we're developing will really help everyone in Texas reach 2050 with a thriving economy and a healthy environment."

Find more information at planettexas2050.utexas.edu

By Darby Kendall• Photography courtesy of Planet Texas 2050